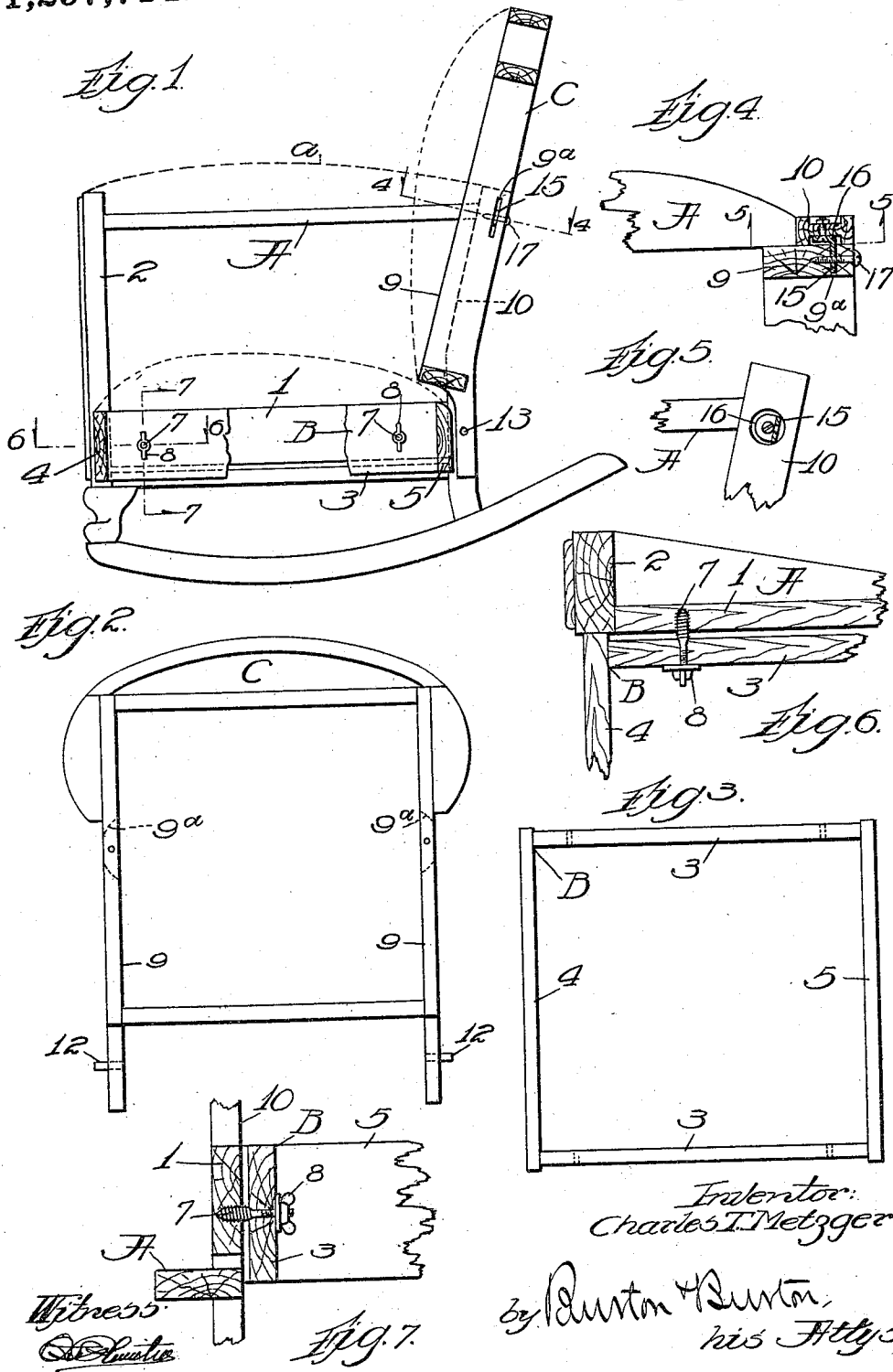


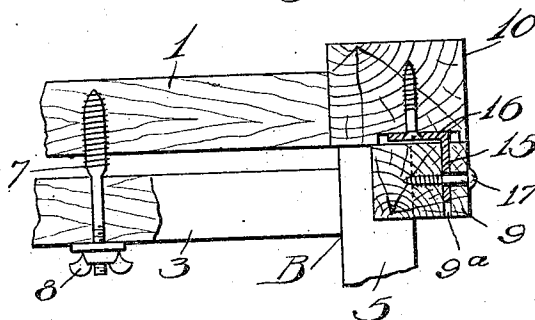
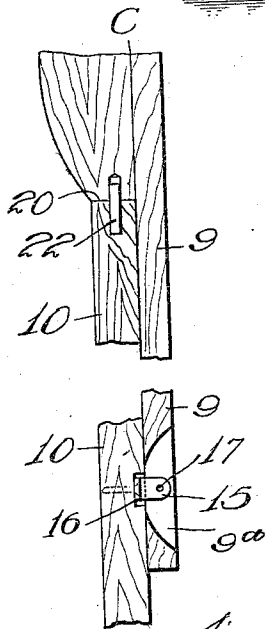
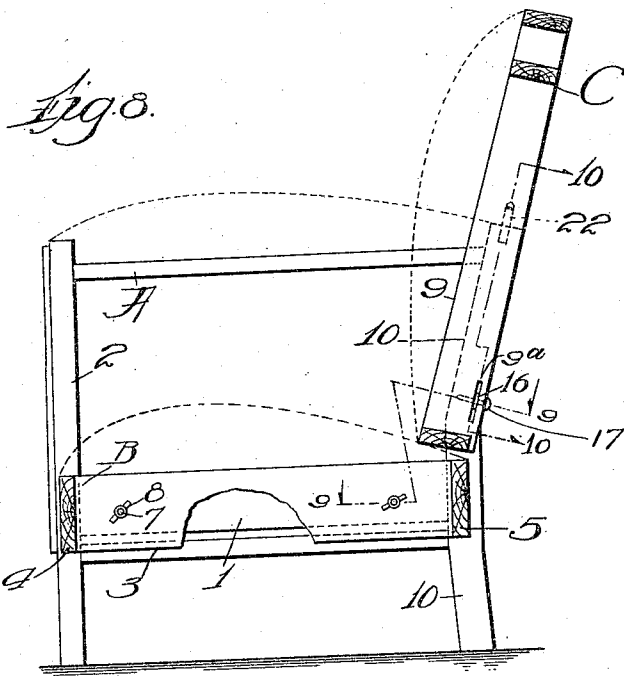
1,297,714.



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1,297,714.



Witness:
[Signature]

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UNITED STATES PATENT OFFICE.

CHARLES T. METZGER, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE PULLMAN COUCH COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS.

KNOCKDOWN FURNITURE.

1,297,714.

Specification of Letters Patent.

Patented Mar. 18, 1919.

Application filed December 16, 1918. Serial No. 266,880.

To all whom it may concern:

Be it known that I, CHARLES T. METZGER, a citizen of the United States, residing at Chicago, in the county of Cook and the State of Illinois, have invented certain new and useful Improvements in Knockdown Furniture, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof.

The purpose of this invention is to provide an improved knock-down construction of an article of furniture, such as a chair, rocker, davenport, sofa or the like. It consists in the elements and features of construction shown and described, as indicated in the claims.

In the drawings:

Figure 1 is a fore-and-aft vertical section of the unupholstered frame of a seat embodying this invention, the outlines of possible upholstery being shown in dotted lines.

Fig. 2 is a front elevation of the back member frame, that is, devoid of upholstery.

Fig. 3 is a plan view of the seat box or frame of the seat devoid of upholstery.

Fig. 4 is a detail section at the line, 4—4, on Fig. 1.

Fig. 5 is a detail section at the line, 5—5, on Fig. 4.

Fig. 6 is a detail section at the line, 6—6, on Fig. 1.

Fig. 7 is a detail section at the line, 7—7, on Fig. 1.

Fig. 8 is a view similar to Fig. 1, showing the modification of the connection between the end members and the back member.

Fig. 9 is a section at the line, 9—9, on Fig. 8.

Fig. 10 is a detail section at the line, 10—10, on Fig. 8.

The frame of the seat shown in the drawings consists substantially of four elements, namely, two end members, A, a seat box, B, and the back frame, C. Each of the end members comprises, with other members framed together for vertical rigidity, a vertically flat fore-and-aft extending bar, 1, at the lower part, that is, at the plane of the seat, and the vertically flat up-and-down extending bar, 2, which extends from the level of the seat box, B, as high as the end members, which are high enough to constitute or support arm rests, as indicated by the dotted lines, a, at the upper end of the end member,

shown in Fig. 1. The seat frame or box, B, comprises vertically flat fore-and-aft extending end members, 3, 3, and vertically-flat longitudinally-extending front and back members, 4 and 5. The front and back members preferably extend slightly beyond the side members, as seen in Fig. 3. The seat box is adapted to be interposed between the two end members and bound securely thereto, the seat box constituting means of rigidly connecting together the two end members, and defining the erect position of the end members by the up-and-down-extending end edges of the front and back members of the seat box which are clamped against the vertically-notched fore-and-aft extending bars, 1, of the end member by means of clamping bolts, 7—7, which are anchored in one of the two connected parts, viz: seat box and end member, and extend through the facing element of the other member for receiving the clamping nuts, 8. As illustrated, and preferably, these bolts are anchored in the fore-and-aft-extending bar of the end member and project through the fore-and-aft-extending bar of the seat box for receiving the nuts at the inner side of the seat box where the protrusion of the bolts for receiving the nuts and of the nuts themselves is unobjectionable. Obviously, the positioning of the end members by the ends of the seat box may be regarded as effected by the verticality of the end members of the seat box generally, not limited to the verticality of the end edges of the front and back bars of said seat box; but the construction shown having the front and back bars projecting slightly beyond the end bars of the seat box is preferable, because the clamping bolts being positioned quite a distance inward from the corners of the box, the resiliency of the said end bars of the box is brought into play when the bolts are tightened, and the reaction of these bars which are slightly sprung out of their plane in the tightening of the bolts, tends to keep the junction snug and free from shake notwithstanding the slight shrinkage of the wood which may occur, or its tendency to become set in the compressed condition resulting from the tightening of the nut.

The back member, C, comprises the vertically flat up-and-down-extending end bars, 9, 9, which are adapted to seat flatwise against the vertically flat up-and-down-ex-

tending rear bars, 10, 10, of the end frame, These facing bars, 9 and 10, of the back member and the end members respectively, are engaged with each other by projections 5 and sockets on the two facing members respectively, one such engagement being made at the lower part of the back member, and the other at the upper part of the end member. As illustrated, the engagement at the 10 lower part of the back member is effected by a tenon, 12, projecting from the end member bar, 10, engaging a socket, 13, near the lower end of the end bar, 9, of the back member; and the upper engagement is effected by means of a flat tenon, 15, preferably constituting one flange of an angle iron, 16, whose other flange is bolted to the outer face of the rear bar, 10, of the end member; and the end bar, 9, of the end member has a 20 saw-cut slot, 9^a, into which the flange, 15, projects, said flange having a hole through which a screw, 17, screwed into the rear end of said bar, 9, extends for cross-pinning the bracket securely in the back member bar, 9. 25 It will be seen that by this construction the end members are tied together at the lower part by the seat box, and at the upper part by the back member, while the back member is secured against fore-and-aft movement between the two end members by the tenon-and-socket engagement of the back member with the end members at the lower part of the back member.

In the modifications shown in Figs. 8, 9 35 and 10, the back member is joined at its lower corners to the end members by angle iron tenons, 16, each permanently secured by one flange to the inner face of the up-and-down rear side bars of the end members 40 respectively, the other flange forming the tenon and engaging a saw-cut slot, 9^a, in the adjacent up-and-down end bar of the back member, and cross-pinned in the slot by a screw, 17, as already described in respect to 45 the similar engagement at the upper corner of the end members of the form shown in the earlier figures. In said modification of Figs. 8, 9 and 10, at the upper rear corner of the end members, the rear side bars of said end 50 members, which also constitute the rear legs of the chair, abut against downwardly-facing shoulders, 20, which jut off from the outer face of the end bars of the back member, and a tenon-and-socket engagement is provided between said upper end of the rear 55 leg and the said downwardly-facing shoulder of the back member, as seen at 22 on Fig. 10.

I claim:—

1. A knock-down article of furniture comprising in combination, end members and a 60 seat member, the seat member being in the form of a four-sided box, the end members having each a vertically flat fore-and-aft bar, and the box having outwardly-facing

vertically-extending surfaces positioned for 65 facing the fore-and-aft-extending bars of the end members respectively, one of the two facing parts at each end having anchored bolts, and the other having holes for said bolts, and clamp-nuts on the ends of the 70 bolts for clamping the two facing bars together.

2. A knock-down article of furniture comprising upright end members, horizontally extending connecting member and a back 75 member, the back member having up-and-down extending bars abutting up-and-down extending bars on the end members respectively, tenons and sockets on said members respectively, effecting engagement at the 80 upper end portion of the end members and the lower corners of the back member, the tenon and one of said connections at each end of the back member having a cross aperture and means for cross-pinning said 85 tenon in its socket.

3. In the construction defined in claim 1, in combination with the parts therein named, a back member comprising a 90 top frame having vertically-flat up-and-down extending end bars facing the end bars respectively of the back member, the two facing bars at each end of the back member having inter-engaging sockets and projections adapted to engage by endwise 95 thrust of the projections into the sockets in closing up the bars of the end member against the bars of the back member, said inter-engaging devices being provided near 100 the upper end of the end member and near the lower end of the back member, and means for cross-pinning the projection in the socket at the upper end against endwise withdrawal.

4. In the construction defined in claim 105 1, in combination with the parts therein named, a back member comprising a back frame having up-and-down extending vertically-flat end bars, the end members having vertically flat up-and-down extending 110 bars adapted to face said end bars of the back member respectively, and means for engaging the end bars of the back member with the up-and-down extending bars of the end members, respectively, consisting of 115 inter-engaging projections and sockets, one on the end member and the other on the back member at the lower part of the back member, adapted to be engaged by end thrust and prevent relative back and forth 120 movement of the back member and end member, and inter-engaging elements on the back member and end members respectively at the upper part of the back member, adapted for engagement against relative 125 movement of the back member and end members lengthwise of the back member.

5. In the construction defined in claim 1,

the anchored bolts being in the end members and the bolt apertures being in the end bars of the seat member.

6. In the construction defined in claim 1, the front and back bars of the seat box being extended slightly beyond the end bars thereof for bearing directly against the spacing bars of the end members, and the bolt connections for clamping together said facing bars being positioned at a consider-

able distance inward from the front and back members of the seat box, whereby resilient reaction of the end bars of the seat box is obtained in the tightening of the bolts for clamping said facing bars together. 15

In testimony whereof, I have hereunto set my hand at Chicago, Illinois, this 11th day of December, 1918.

CHARLES T. METZGER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."